Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently amended) An integral solid state radiation coupler/modulator comprising a radiation input end and a radiation output end said radiation input end connected to said radiation output end through first and second diverging and third and fourth converging radiation paths wherein said third and fourth radiation paths converge to said output end at an angle 2θ wherein θ is an interference angle calculated to produce an exiting radiation interference pattern of radiation entering said input end at an interference zone outside said output end, wherein said radiation entering said input end has an optical field amplitude and said interference pattern has a primary constructive interference fringe adapted to maximize transfer efficiency of said optical field amplitude between said entering beam and a spatially fixed radiation receiver input end positioned in said interference zone by matching said primary constructive interference fringe spatial mode to said radiation receiver input end mode, the coupler/modulator further comprising a phase shifting element in at least one of said diverging or converging radiation paths and an analog modulator connected to said phase shifting element thereby to laterally shift said primary constructive interference fringe in the spatial domain relative to the spatially fixed radiation receiver input.

2. (Original) The coupler/modulator according to claim 1 wherein said radiation is optical radiation.

3. (Original) The coupler/modulator according to claim 2 wherein said converging and diverging radiation paths are solid state optical channels.

4. (Original) The coupler/modulator according to claim 1 wherein said converging and diverging radiation paths are solid state waveguides.

5. (Original) The coupler according to claim 2 wherein said radiation is emitted by a laser and said laser is integral with said coupler/modulator input end.

6. (Original) The coupler/modulator according to claim 1 further comprising two substantially parallel channels between said first and second diverging and said third and fourth converging channels respectively.

7. (Currently amended) The coupler/modulator according to claim 6 further comprising a phase shifting element in each of said two parallel channels and a third ~~one~~ phase shifting element in between the parallel channels and wherein said phase shifting elements are connected to said analog modulator driver in a push pull configuration.

8. (Currently amended) A method for simultaneously modulating and coupling a radiation beam to a receptor input end, said input end comprising an input mode, the method comprising:

a. splitting said radiation beam into a first and a second substantially equal intensity beams propagating along first and second solid state equidistant diverging channels;

b. directing said split diverging beams to and along a third and a fourth also solid state equidistant converging radiation propagation channels respectively, said channels converging at an angle 2θ relative to each other, wherein said third and fourth channels terminate at an end point prior to overlapping;

c. forming an interference pattern of said converging third and fourth beams in an interference zone after exiting said third and fourth channels said pattern comprising at least one constructive interference fringe having an optical field amplitude and a spatial mode;

d. positioning said radiation receptor input end in said interference zone at a point where said constructive interference fringe mode matches said first receptor input mode; and

e. altering the optical field amplitude incident on said receptor input end by applying an analog modulating signal to shift the phase of said at least one of said beams and thereby laterally shifting the position of said constructive interference fringe across said input end of said receptor.